



Short course SC8

Exploration Geochemistry: Applying Fundamentals in the Field

Presenters:

David Cohen, University of NSW and a past-president of the AAG
Dennis Arne, Telemark Geosciences and vice-president of the AAG
Steve Piercey, Memorial University

Held in conjunction with:

PACRIM

Tuesday 2 April, 2019

Cordis Hotel, Auckland



**8
CPD**

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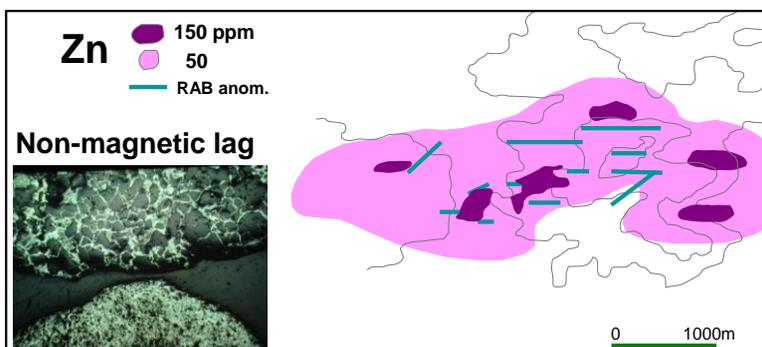
PROGRAM

8:00 - 8:20	Coffee	
8:20 - 8:30	Introduction to the day	David Cohen
8:30 - 10:00	Lithogeochem and mineral systems	Steve Piercey and Dennis Arne
10:00 - 10:20	Coffee	
10:20 - 11:50	The secondary environment	Dennis Arne and David Cohen
11:50 - 12:15	IoGAS exercise (tba)	Dennis Arne
12:15 - 13:00	The problem of cover	David Cohen
13:00 - 14:00	Lunch	
14:00 - 14:20	Mandamah exercise (paper)	David Cohen
14:20 - 15:05	Analytical options and QA/QC	Dennis Arne
15:05 - 15:15	QC exercise (paper)	David Cohen
15:15 - 15:30	Coffee	
15:30 - 16:15	Geochemical mapping	David Cohen
16:15 - 16:40	Mapping exercise (Excel)	David Cohen
16:40 - 17:00	General discussion	All

An understanding of the basic geochemical concepts of element distribution, geochemical processes and relationships at various scales will be combined with sampling theory and practices to provide a model-based geochemical exploration workshop. Sampling strategies, sample types, and key analytical methodologies will be discussed, leading into multi-element strategies for data interpretation and target selection. The workshop will utilise a variety of mineralisation styles to demonstrate how simple chemical principles can be applied to enhance discovery through the application of chemistry in mineral exploration. There will be a mixture of presentations and short practical exercises.

Presenters

	<p>David Cohen FAAG FRSN</p> <p>Regolith processes, geochemical mapping and the problem with cover</p> <p>David is former head of the School of Biological, Earth and Environmental Sciences at UNSW, and a former President of the Association of Applied Geochemists. He has over 30 years research experience in exploration and environmental geochemistry with projects based in Australia, Europe, Asia, the Middle East and North America. He has published over 70 papers, book chapters and major government reports and is an associate editor of the Journal of Geochemical Exploration. He was the 2013 AusIMM visiting lecturer to New Zealand and 2018 AAG Silver Medallist</p>
	<p>Dennis Arne FAAG</p> <p>The secondary environment, analytical methods and QAQC</p> <p>Dennis is Principal of Telemark Consulting. He has over 35 years' experience as a geologist specializing in geochemistry and economic geology in a wide range of environments in both the minerals and the petroleum industries, as an academic, and in geological surveys. In recent years he has been employed by several mining industry consulting groups contributing to global exploration programs for precious and base metals, as well as battery metals. He has published in the areas of applied geochemistry, economic geology, alteration mineralogy and thermal history analysis for tectonic and petroleum exploration applications. He now works as an independent consultant based in regional Victoria.</p>
	<p>Steve Piercey FAAG FSEG</p> <p>Litho-geochemical processes and methods</p> <p>Steve is the NSERC-Altius Industrial Research Chair in Mineral Deposits at Memorial University and was previously principal of SJPGeoConsulting. He has over 25 years' experience and a very extensive publication track record in economic geology focusing on the application of field methods, litho-geochemistry, and isotopes to understanding mineral deposit genesis and exploration commodities, deposit types and jurisdictions. He is a recipient of the W.W. Hutchison, H.S. Robinson and the Lindgren medals. He has an economic geology blog (https://stevepiercey.wordpress.com/).</p>



Included:

- Morning and afternoon tea, coffee and accompanying snacks
- Lunch

Minimum number of participants: 15

Cost: NZ \$250 Member
 NZ \$300 Non Member
 NZ \$50 Student

Further information: Email David Cohen at d.cohen@unsw.edu.au

Participants are encouraged to bring a laptop